Wind Energy Program

Development and Deployment



Early Stage Program Activities

- □ Situation prior to SBC 1:
 - Much talked about wind potential in NY
 - Existing utility wind research ending
 - Interest in green marketing in California/Pennsylvania
 - Retail access in NY less developed
- Goals of SBC 1 and other early stage activities:

Introduce physical plant and sustain wind resource measurement and related research activities

- □ Actions:
 - Competitive bidding for projects (PON 437-98)
 - Wind mapping (PON 408-98)*
 - Prospecting for sites(PON 529-00)

* statutory

Early Stage Program Activities

□ Results:

Approximately \$ 10 million committed:

- Madison Wind Plant, 11.5 MW, operating since 2000
- Fenner Wind Project, 30 MW, nearly constructed, operation by December 2001
- Buffalo Wind Project, 10 30 MW, date of operation uncertain
- Prospecting, > 3000 acres under control now,
 150 MW potentially operable by 2003
- NYS Wind Map available on-line and being used by landowners





Early Stage Program Attributes

- □ Notables....
 - Good optics/positive public reaction
 - Developer/landowner interest in New York is high
- □ But....
 - Very limited green retail marketing in New York
 - Markets (private and mandated) for green energy in neighboring states are not fully developed or easy to reach
- □ Result....

Value of environmental attributes associated with Madison and Fenner energy is not recognized financially

Wind Program Budget

(work in progress)

Green Power Supply :	%	\$
Risk-sharing (Fenner Scale-up, 30MW)	6%	3,000,000
Analysis, Mapping(GIS), Coordination		950,000
Prospecting		600,000
Green Power Auction	53%	27,000,000
Green Market Development :		
Green Marketing Incentives	27%	13,700,000
Green Certificate Registry/Exchange	1%	650,000
Small Turbine Demonstration	1%	460,000
Small Turbine Applications	6%	2,800,000
Technology/Market Assessment and Education	3%	1,550,000
Total Program Budget		50,710,000

Currently committed programs are in bold

Funds Committed: \$7,410,000 (15 %)



- □ PON 599-01 is an open solicitation
- Fund market trials/testing/research of unique and promising green product market concepts
- □ Funding commitment; \$300,000; up to \$ 100,000 per contact



Green Marketing Incentives Program

Deployment Phase

- □ PON 599-01 is an open solicitation
- Pay mature marketers for contracting with New York consumers for the purchase of green power products
- Payments will be based on verified performance
- Funding target is \$ 4 M annually(w/increasing marketer cost share)
 - Year 1, \$ 3.0 M (NYSERDA cost share; 75 %)

Renewable Energy Credit Trading Program

- □ PON 607-01 is an open solicitation
- Explore creation of environmental attribute accounting and trading system(with exchange)
- Contract commitment
 - Fund up to three(3) entities for concept development/testing (Phase 1, \$150,000)
 - Fund one contractor to build/deploy desired system (Phase 2, \$500,000)
 - NYSERDA recoupment required on deployment

Green Power Auction Program

- Program Opportunity notice to be issued in next few months
- Competitive auction
 - Purchase/trade of certificates
 - Financial subsidy /contract for differences
 - Fund subject to performance
- □ Fund commitment
 - Annual auction over 3-year period
 - Contract length of five(5) years or longer
 - \$27,000,000 (NYSERDA)
 - Approx. 150 MW supported

Small Turbine Program

- Prospective sites (100 applications) identified/ feasibility analyses underway
- 9 Installations in three (3) sectors
 municipal, small business and agriculture
- Monitor performance (includes DOE STVP)
- Gather consumer feedback and develop "going forward" programs
- NYSERDA funding- \$460,000 with 50 % participant cost share
- Funding for high-value/small turbine applications to be offered in upcoming Agricultural Initiatives Program solicitation

Technology/Market Assessment and Education

- Multiyear funding of \$ 1,550,000 committed
- Qualified contractors selected
- □ Focus of efforts:
 - Publication of educational materials for consumers and policymakers
 - Targeted research/assessments
 - Program and market data analysis
 - Training
 - Workshops/seminars

State Renewable Purchase Obligation

- □ 10 % of energy in 2005 ; 20% in 2010
- Qualifying technologies:

Wind, solar thermal, PV, sustainably managed biomass, tidal, geothermal, methane waste and fuel cells

- Central procurement approach likely with NYSERDA as lead advisory agency
- Varied contract lengths of up to 5, 10, 15, and 20 years
- Expected green premium ranging between .8 –
 1.5 cents/kwh over the long-term

Unguarded Intersections...Closing Thoughts

- local political subdivisions need information
- consumers need information/involvement
- efficient markets do not follow prescribed paths; regardless of political and regulatory boundaries and policies
- electric and air regulators think differently
- coordination of state benefit funds can be a powerful tool assuming we can decide on the metrics...is it environmental quality or local economic development?

Look for NYSERDA program activities, including those discussed today, at:

www.nyserda.org; under "Funding Opportunities"

